



United States Environmental Protection Agency  
Office of Environmental Measurement & Evaluation  
11 Technology Drive  
North Chelmsford, MA 01863-2431

Laboratory Report

December 04, 2007

Jim DiLorenzo - HBO  
USEPA New England Region 1  
One Congress Street  
Boston, MA 02114 - 2023

*Olin Splits  
11/3/07*

Project Number: 07110022  
Project: Olin Chemical - Wilmington, MA  
Analysis: Ion Chromatography Anions  
Analyst: Jeremy O'Kelly *9/6 12/4*

Superfund Records Center  
SITE: *07110022*  
BREAK: *12/4/07*  
STATUS: *12/4/07*

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Samples were analyzed following the EPA Region I SOP, ELASOP-INGDXIC9.

The analysis was performed using either a Dionex ICS-2000 or DX120 Ion Chromatograph.

Date Samples Received by the Laboratory: 11/14/07

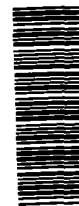
Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Report may contain multiple sections and each section will be numbered independently.

If you have any questions please call me at 617-918-8340 .

Sincerely,

*Daniel N. Boudreau 12/13/07*  
Daniel N. Boudreau  
Chemistry Team Leader



SDMS DocID 280864

**Qualifiers:**

RL = Reporting limit

ND = Not Detected above reporting limit

NA = Not Applicable

NC = Not calculated since analyte concentration is ND

J1 = Estimated value due to MS recovery outside acceptance criteria

J2 = Estimated value due to LFB result outside acceptance criteria

J3 = Estimated value due to RPD result outside acceptance criteria

J4 = Estimated value due to LCS result outside acceptance criteria

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

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NEW ENGLAND LABORATORY

Olin Chemical - Wilmington, MA

**Ion Chromatography Anions**

Client Sample ID: MW202D  
Date of Collection: 11/13/2007 11:00  
Date of Analysis: 11/14/2007 21:46

Lab Sample ID: AA76878  
Matrix: Water  
Final Volume: N/A

CAS Number	Parameter	Concentration mg/L	RL mg/L	Qualifier
	Bromide	1.1	0.50	
	Chloride	210	10	
	Fluoride	1.7	0.20	
	Nitrate	ND	0.50	
	Nitrite	ND	4.0	
	Sulfate	1400	25	

Comments: Fluoride, bromide, and nitrate reported from 1x solution. Chloride and nitrite reported from 20x dilution, and sulfate reported from 50x dilution.

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Olin Chemical - Wilmington, MA

Ion Chromatography Anions

Client Sample ID: MW10S

Date of Collection: 11/13/2007 12:00

Date of Analysis: 11/14/2007 20:28

Lab Sample ID: AA76879

Matrix: Water

Final Volume: N/A

CAS Number	Parameter	Concentration mg/L	RL mg/L	Qualifier
	Bromide	ND	0.50	
	Chloride	12	0.50	
	Fluoride	ND	0.20	
	Nitrate	1.8	0.50	
	Nitrite	ND	0.20	
	Sulfate	38	0.50	

Comments:

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Olin Chemical - Wilmington, MA

Laboratory Blank

Client Sample ID: N/A

Date of Collection: N/A

Date of Analysis: 11/14/2007 19:36

Lab Sample ID: N/A

Matrix Water

Final Volume: N/A

CAS Number	Parameter	Concentration mg/L	RL mg/L	Qualifier
	Bromide	ND	0.50	
	Chloride	ND	0.50	
	Fluoride	ND	0.20	
	Nitrate	ND	0.50	
	Nitrite	ND	0.20	
	Sulfate	ND	0.50	

Comments:

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Olin Chemical - Wilmington, MA

Ion Chromatography Anions

Client Sample ID: GW39  
Date of Collection: 11/13/2007 14:00  
Date of Analysis: 12/04/2007 22:13

Lab Sample ID: AA76880  
Matrix: Water  
Final Volume: N/A

CAS Number	Parameter	Concentration mg/L	RL mg/L	Qualifier
	Bromide	ND	0.50	
	Chloride	62	10	
	Fluoride	ND	0.20	
	Nitrate	3.2	0.50	
	Nitrite	ND	0.20	
	Sulfate	270	10	

Comments: Chloride and sulfate are reported from a 20x dilution.

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Olin Chemical - Wilmington, MA

Ion Chromatography Anions

Client Sample ID: GW76S  
Date of Collection: 11/13/2007 14:45  
Date of Analysis: 12/04/2007 22:39

Lab Sample ID: AA76881  
Matrix: Water  
Final Volume: N/A

CAS Number	Parameter	Concentration mg/L	RL mg/L	Qualifier
	Bromide	ND	0.50	
	Chloride	26	0.50	
	Fluoride	ND	0.20	
	Nitrate	7.7	0.50	
	Nitrite	ND	0.20	
	Sulfate	46	0.50	

Comments:

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Olin Chemical - Wilmington, MA

Ion Chromatography Anions

Client Sample ID: GW55S

Date of Collection: 11/13/2007 16:00

Date of Analysis: 12/04/2007 23:05

Lab Sample ID: AA76882

Matrix: Water

Final Volume: N/A

CAS Number	Parameter	Concentration mg/L	RL mg/L	Qualifier
	Bromide	0.82	0.50	
	Chloride	110	5.0	
	Fluoride	1.3	0.20	
	Nitrate	160	5.0	
	Nitrite	ND	0.20	
	Sulfate	880	10	

Comments: Fluoride, nitrite, and bromide are reported from the 1x sample. Chloride and nitrate are reported from a 10x dilution, and sulfate is reported from a 20x dilution.

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MATRIX SPIKE (MS) RESULTS

Olin Chemical - Wilmington, MA

COMPOUND	SPIKE ADDED mg/L	SAMPLE CONCENTRATION mg/L	MS CONCENTRATION mg/L	MS % REC	QC LIMITS (% REC)
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Sample ID: AA76879

Bromide	5.0	ND	5.0	100	80 - 120
Chloride	1.5	12	13.2	120	80 - 120
Fluoride	1.0	ND	1.2	120	80 - 120
Nitrate	5.0	1.8	6.5	96	80 - 120
Nitrite	5.0	ND	5.4	108	80 - 120
Sulfate	7.5	38	43.1	93	80 - 120

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LABORATORY DUPLICATE RESULTS

Olin Chemical - Wilmington, MA

COMPOUND	SAMPLE RESULT mg/L	SAMPLE DUPLICATE RESULT mg/L	PRECISION RPD %	QC LIMITS RPD (%)
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Sample ID: AA76879

Bromide	ND	ND	ND	20
Chloride	12	12	0.0	20
Fluoride	ND	ND	ND	20
Nitrate	1.8	1.8	0.0	20
Nitrite	ND	ND	ND	20
Sulfate	38	39	2.6	20

Comments:

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Laboratory Fortified Blank (LFB) Results

Olin Chemical - Wilmington, MA

COMPOUND	LFB AMOUNT SPIKED mg/L	LFB RESULT mg/L	LFB RECOVERY %	QC LIMITS %
Sample ID: AA76879				
Bromide	5.0	4.9	98	90 - 110
Chloride	1.5	1.5	100	90 - 110
Fluoride	1.0	1.1	110	90 - 110
Nitrate	5.0	5.3	106	90 - 110
Nitrite	5.0	5.0	100	90 - 110
Sulfate	7.5	7.5	100	90 - 110

Samples in Batch: AA76878, AA76879, AA76880, AA76881, AA76882